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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,918	10/12/2004	Ichizou Nakamura	121446	4876
25944 7590 04/18/2007 OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER MAKI, STEVEN D	
			ART UNIT 1733	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			04/18/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/510,918

Applicant(s)

NAKAMURA, ICHIZOU

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11, 14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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1) A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1-30-07 has been entered.

2) Claims 1-11, 14 and 15 are objected to because of the following informalities: In claim 1 lines 13-14, claim 14 lines 5-6, and claim 15 lines 7-8 and 9-10, "at least one of ... or ..." should be --at least one of ... and ....--. Appropriate correction is required.

3) The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4) Claims 1-11 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claims 1 and 15, the subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention (i.e. the **new matter**) is the subject matter of the negative limitation of "the upper portion nowhere extends beyond the bottom portion in a plan view of the sub

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block". This subject matter has no explicit basis in the original disclosure and redefines the invention in a manner not contemplated by the original disclosure. It is suggested to delete --the upper portion nowhere extends beyond the bottom portion in a plan view of the sub block--.

5) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Yang

7) **Claims 1-4, 8-9 and 14-15 are rejected under 35 U.S.C. 102(a), (e) as being anticipated by Yang (US 2003/0047266).**

The claimed motorcycle tire is anticipated by Yang's bicycle tire as shown in figure 2. One of ordinary skill in the art would readily appreciate that the tread of Yang's

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bicycle tire is made of rubber. The claimed "main blocks" read on the "large shoulder blocks". On the left side of figure 2, two and 1/2 of these large shoulder blocks are illustrated. The claimed sub blocks read on the "small blocks". On the left side of figure 2, four of these small blocks are illustrated. As can be seen from figure 2, the small blocks have a smaller height than the large shoulder blocks. The small blocks are axially between the large shoulder blocks on one side of the tread and the large shoulder blocks on the other side of the tread. Also, a diagonal line can be extended across the tread such that the line intersects a pair of large shoulder blocks and a small block. In the circumferential direction, a pair of the small blocks are located between a pair of large shoulder blocks. As can be seen from figure 2, the upper surface of the small block is defined by two flat surfaces, which are inclined with respect to each other relative to the radial direction. This upper structure of the small block in figure 2 defines the claimed smaller sectional area of the upper face.

Potts et al

**8) Claims 1-11 and 14-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Potts et al (US 5,088,535).**

The claimed motorcycle tire reads on Potts et al's tire - the tire of figures 1 and 2 or the tire of figures 3 and 4. In any event: it would have been obvious to one of ordinary skill in the art to provide Potts et al's tire as a motorcycle tire having spaced apart main blocks and lower height beveled sub blocks such that the beveled blocks define a bending point and a smaller upper face area as claimed since (1) Potts et al

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teaches providing either a bicycle tire or a motorcycle tire with spaced apart outer blocks 17, intermediate blocks 16 and center blocks 15 (the spacing of the blocks defining a relatively large negative ratio), (2) Potts et al teaches at col. 5 lines 3-6 progressively increasing the heights of the blocks from the center to the side of the tire (the intermediate "sub" blocks 16 thereby having a smaller height than the outer "main" blocks 17) and (3) Potts et al teaches improving gripping engagement with the ground by beveling the intermediate blocks so that these blocks can sink into the ground while making it easier for the ground to ride over the blocks (col. 3 lines 13-28, 58-61). The beveled blocks define a bending portion at a mid point as best seen in figure 4.

Potts et al does not anticipate claim 11. However, it would have been obvious to one of ordinary skill in the art to provide Potts et al's motorcycle tire pneumatic tire with a radial carcass since it is taken as well known / conventional per se in the motorcycle art to use radial tire construction for pneumatic motorcycle tires.

Japan 417

**9) Claims 1-11 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 417 (JP 2000-25417) in view of Potts et al (US 5088535) and Yang.**

Japan 417 discloses a pneumatic motorcycle tire having a tread comprising main blocks 14, 18 and sub blocks 16. The negative ratio of the tread is at least 75%. The height of the sub blocks 16 is 40-80% of the height of the main blocks. One of ordinary skill in the art would readily understand that Japan 417's tread is made of rubber. In any event: it would have been obvious to one of ordinary skill in the art to provide Japan

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417's tire such that the tread including the main blocks 14, 18 and sub blocks 16 are made of rubber since it is taken as well known / conventional per se in the motorcycle tire art to use rubber to form a block pattern tire tread for a motorcycle tire. Japan 417 teaches that the tire has remarkably improved skidding performance during cornering without impairing the traction performance on muddy ground. In particular, Japan 417 teaches that the third blocks 16 (sub blocks) resist flow of mud across the tire width between the cross direction block rows 14. This teachings indicates that sub blocks sink into the muddy ground. Japan 417 also teaches that the height of the sub blocks is lower than that of the main blocks 14 so that the flow of mud between the main blocks is not completely blocked up. This teaching indicates that mud should ride over the sub blocks 16. Japan 417 does not recite providing the sub blocks 16 with a bending portion.

As to claims 1, 14 and 15, it would have been obvious to one of ordinary skill in the art to provide the sub blocks 16 of Japan 417's motorcycle tire for use on muddy ground (figure 1, figure 2, figure 4) such that the sub block has a beveled edge defining a mid bending point as claimed since (1) Japan 417, directed to a motorcycle tire, teaches that the sub blocks 16 should sink into the muddy ground to improve skidding performance while also allowing mud to flow over the sub blocks to prevent completely blocking the region between the main blocks, (2) Potts et al, directed to a bicycle tire or a motorcycle tire, suggests beveling blocks of an off-road tire so that (a) during cornering the beveled block can sink into the ground to improve gripping action while also making it easier for the ground surface to ride over the beveled block (col. 3 lines

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13-28, 58-61, col. 6 lines 10-11) and (3) Yang shows beveling sub blocks in a tread of a bicycle tire (figure 2).

As to claims 2-4, note arrangement of main blocks 14, 18 and sub blocks 16 in the figures.

As to claims 5-7, the claimed block area ratio would have been obvious and could have been determined without undue experimentation in view of (1) Japan 417's teaching to add low height sub blocks 16 to improve skidding performance and (2) Potts et al's suggestion to bevel blocks to improve gripping action. As to the negative ratio, Japan 417 teaches using a negative ratio of at least 75%. As to the curvature ratio, Japan 417's tire is a motorcycle tire - such as tire having a relatively large curvature ratio. As to the block height ratio, Japan 417 teaches a sub block 16 height of 40-80% of the main block height.

As to claims 8 and 9, the claimed limitations regarding the bending portion would have been obvious in view of the above noted suggestion from Potts et al to bevel blocks.

As to claim 10, Japan 417 orients the low height sub blocks 16 in the circumferential direction. See figures.

As to claim 11, it would have been obvious to one of ordinary skill in the art to provide Japan 417's pneumatic tire with a radial carcass since it is taken as well known / conventional per se in the motorcycle art to use radial tire construction for pneumatic motorcycle tires.



Remarks

10) Applicant's arguments with respect to claims 1-11 and 14-15 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 1-30-07 have been fully considered but they are not persuasive.

In view of the new ground of rejection and the citation and application of Yang, no allowable subject matter has been indicated at this time.

Applicant's arguments regarding the combination of Japan 417 and Potts et al are not persuasive since (A) Japan 417, directed to a motorcycle tire, teaches that the sub blocks 16 should sink into the muddy ground to improve skidding performance while also allowing mud to flow over the sub blocks to prevent completely blocking the region between the main blocks and (B) Potts et al, directed to a bicycle tire or a motorcycle tire, suggests beveling blocks of an off-road tire so that (a) during cornering the beveled block can sink into the ground to improve gripping action (col. 3 lines 12-28) while also making it easier for the ground surface to ride over the beveled block (col. 3 lines 13-28, 58-61, col. 6 lines 10-11).

11) No claim is allowed.

12) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

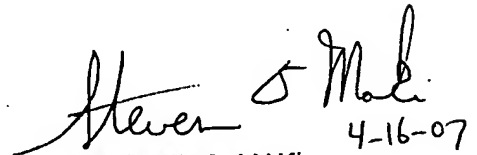
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven D. Maki  
April 15, 2007

  
STEVEN D. MAKI  
PRIMARY EXAMINER  
4-16-07